

NOTES:

EACH SQUARE EQUALS 100 mm.

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ALL LETTERS ARE TO BE WHITE.

USE THE SIZES OF LETTERS SHOWN UNLESS SMALLER OR LARGER SIZES ARE NEEDED. THE SIZE OF LETTERS MAY BE SCALED PROPORTIONATELY DOWN BY APPROXIMATELY ONE-THIRD FOR LOW-SPEED, URBAN CONDITIONS. THE MINIMUM HEIGHT OF ANY LETTER IS 1.8 m. LARGER SIZES MAY BE USED FOR ABOVE AVERAGE SPEEDS AND OTHER CRITICAL LOCATIONS.

DO NOT EXCEED MORE THAN ONE LANE IN WIDTH FOR ANY PAVEMENT MARKINGS EXCEPT IN THE CASE OF THE WORD "SCHOOL". SEE DTL. DWG. NO. 620-10 FOR MORE INFORMATION.

FOR MULTIPLE LINES OF INFORMATION, PLACE THE INFORMATION SO IT READS IN THE DIRECTION OF TRAVEL. DO NOT EXCEED THREE LINES OF INFORMATION AT ANY LOCATION.

WHEN WORDS AND SYMBOLS ARE USED IN COMBINATION, SPACE THEM AT LEAST FOUR TIMES THE HEIGHT OF CHARACTERS FOR LOW-SPEED ROADS, BUT NOT MORE THAN TEN TIMES THE HEIGHT OF THE CHARACTERS UNDER ANY CONDITION.

ON NARROW, LOW-SPEED BICYCLE PATHS, SIZES OF LETTERS MAY BE SMALLER THAN SUGGESTED, BUT TO THE RELATIVE SCALE.

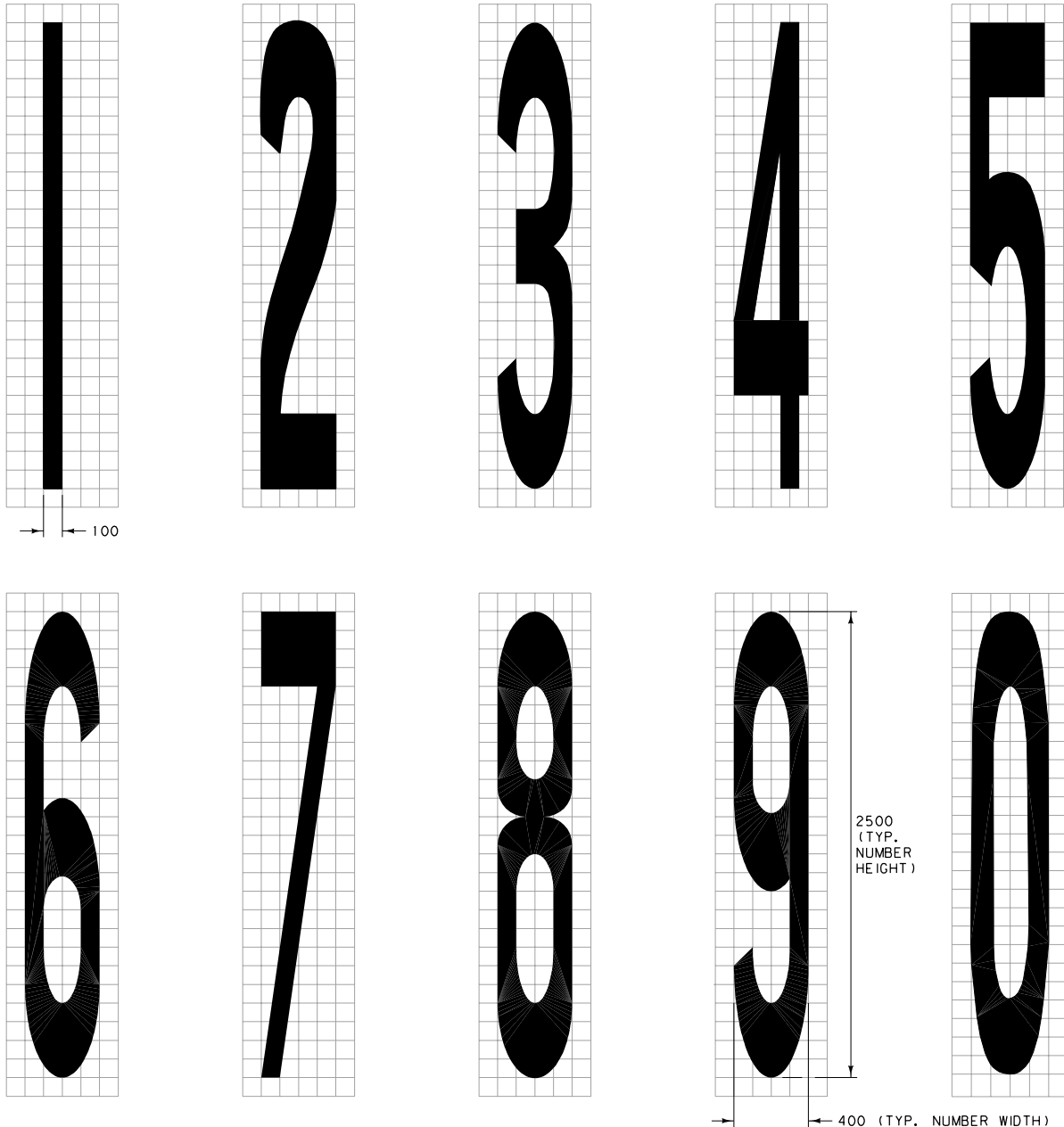
QUANTITIES ARE BASED ON THE SIZES OF PAVEMENT MARKINGS SHOWN AND ARE FOR ESTIMATING PURPOSES ONLY.

PAINT VOLUMES ASSUME A 0.381 mm THICKNESS.
EPOXY VOLUMES ASSUME A 0.508 mm THICKNESS.

QUANTITIES			
LETTER	AREA m²	PAINT (liters)	EPOXY (liters)
A	0.52	0.20	0.26
B	0.68	0.26	0.35
C	0.47	0.18	0.24
D	0.60	0.23	0.30
E	0.61	0.23	0.31
F	0.45	0.17	0.23
G	0.54	0.21	0.27
H	0.58	0.22	0.29
I	0.25	0.10	0.13
J	0.35	0.13	0.18
K	0.59	0.22	0.30
L	0.37	0.14	0.19
M	0.71	0.27	0.36
N	0.66	0.25	0.34
O	0.57	0.22	0.29
P	0.51	0.19	0.26
Q	0.58	0.22	0.29
R	0.60	0.23	0.30
S	0.60	0.23	0.30
T	0.37	0.14	0.19
U	0.53	0.20	0.27
V	0.46	0.18	0.23
W	0.66	0.25	0.34
X	0.45	0.17	0.23
Y	0.38	0.14	0.19
Z	0.49	0.19	0.25

ALL DIMENSIONS ARE MILLIMETERS
(mm) UNLESS OTHERWISE NOTED.

DETAILED DRAWING	
REFERENCE STANDARD SPEC. SECTION 620	DWG. NO. 620-00
PAVEMENT MARKINGS (LETTERS)	
EFFECTIVE: FEBRUARY 2005	
	MONTANA DEPARTMENT OF TRANSPORTATION



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ON NARROW, LOW-SPEED BICYCLE PATHS, SIZES OF NUMBERS MAY BE SMALLER THAN SUGGESTED, BUT TO THE RELATIVE SCALE.

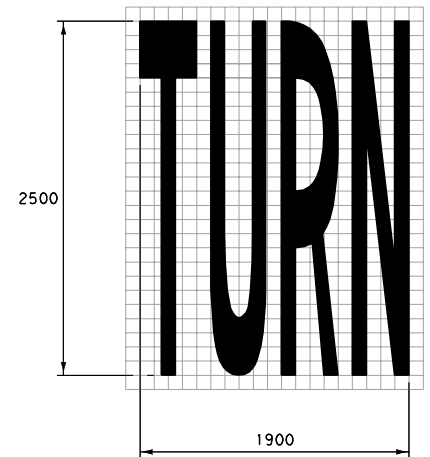
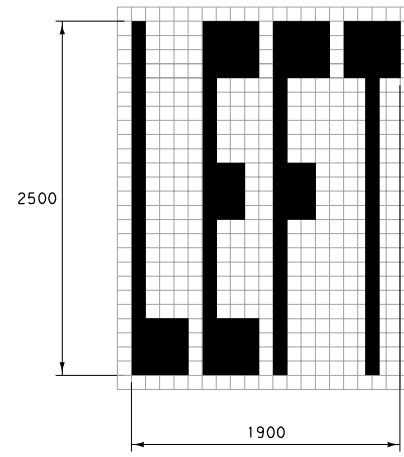
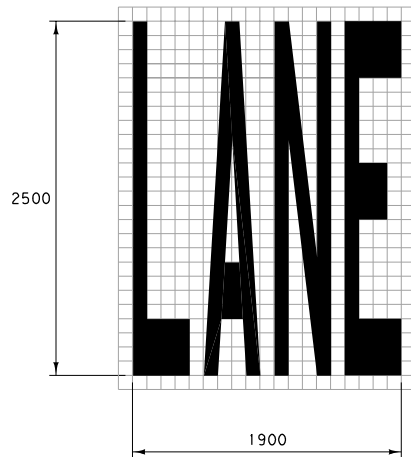
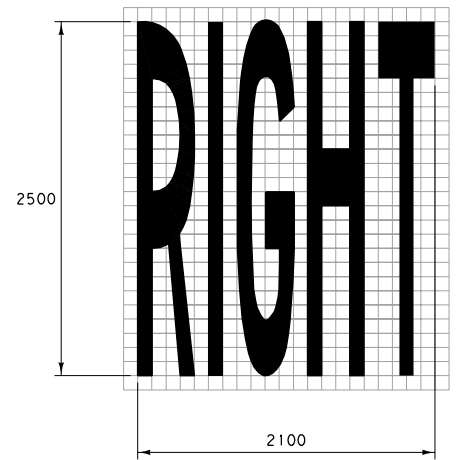
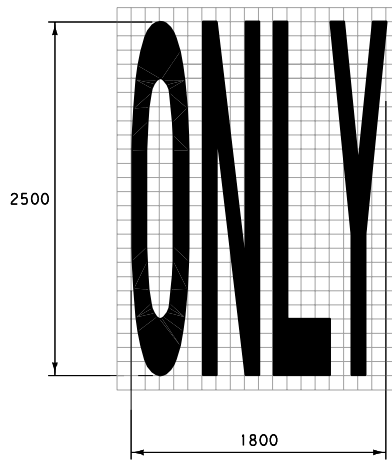
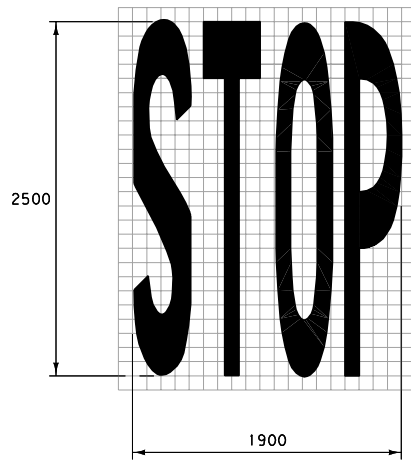
QUANTITIES ARE BASED ON THE SIZES OF PAVEMENT MARKINGS SHOWN AND ARE FOR ESTIMATING PURPOSES ONLY.

PAINT VOLUMES ASSUME A 0.381 mm THICKNESS.
EPOXY VOLUMES ASSUME A 0.508 mm THICKNESS.

QUANTITIES			
#	AREA m ²	PAINT (liters)	EPOXY (liters)
1	0.25	0.10	0.13
2	0.61	0.23	0.31
3	0.54	0.21	0.27
4	0.50	0.19	0.25
5	0.62	0.24	0.31
6	0.62	0.24	0.31
7	0.37	0.14	0.19
8	0.70	0.27	0.36
9	0.62	0.24	0.31
0	0.62	0.24	0.31

ALL DIMENSIONS ARE MILLIMETERS
(mm) UNLESS OTHERWISE NOTED.

DETAILED DRAWING	
REFERENCE STANDARD SPEC. SECTION 620	DWG. NO. 620-05
PAVEMENT MARKINGS (NUMBERS)	
EFFECTIVE: FEBRUARY 2005	
 serving you with pride	MONTANA DEPARTMENT OF TRANSPORTATION



NOTES:

UNLESS OTHERWISE NOTED EACH SQUARE EQUALS 100 mm.

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ALL WORDS ARE TO BE WHITE.

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DO NOT EXCEED MORE THAN ONE LANE IN WIDTH FOR ANY PAVEMENT MARKINGS, EXCEPT IN THE CASE OF THE WORD "SCHOOL". WHEN "SCHOOL" IS EXTENDED TO THE WIDTH OF TWO LANES, SCALE THE WORD UP PROPORTIONATELY TO FIT THE APPLICATION WIDTH.

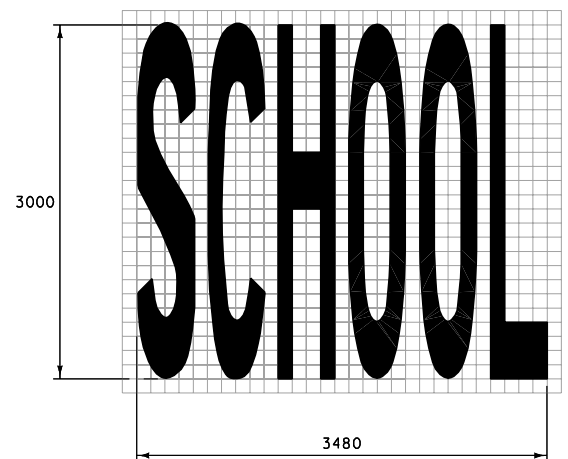
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EPOXY VOLUMES ASSUME A 0.508 mm THICKNESS.



EACH SQUARE EQUALS 120 mm

QUANTITIES

WORD	AREA m ²	PAINT (liters)	EPOXY (liters)
STOP	2.05	0.78	1.04
ONLY	1.98	0.75	1.01
RIGHT	2.34	0.89	1.19
LANE	2.16	0.82	1.10
LEFT	1.80	0.69	0.91
TURN	2.16	0.82	1.10
SCHOOL	4.54	1.73	2.31

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(mm) UNLESS OTHERWISE NOTED.

DETAILED DRAWING

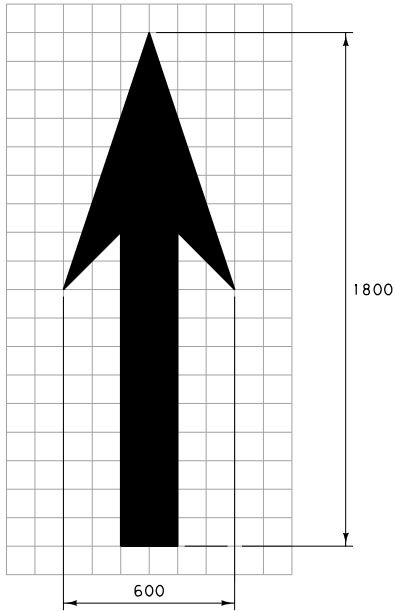
REFERENCE DWG. NO.
STANDARD SPEC. 620-10
SECTION 620

PAVEMENT MARKINGS (WORDS)

EFFECTIVE: FEBRUARY 2005

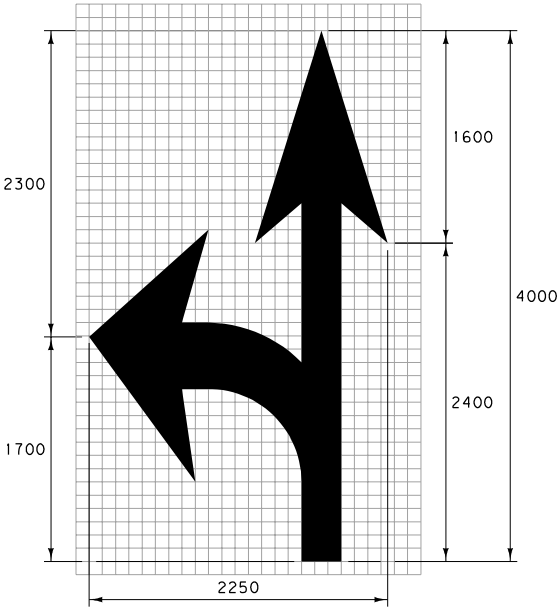
DIRECTIONAL ARROW FOR BIKE LANE

AREA = 0.41 m²
P = 0.16 L
E = 0.21 L
(1 SQUARE = 100 mm)



COMBINED ARROW

AREA = 2.54 m²
P = 0.97 L
E = 1.29 L
(1 SQUARE = 100 mm)

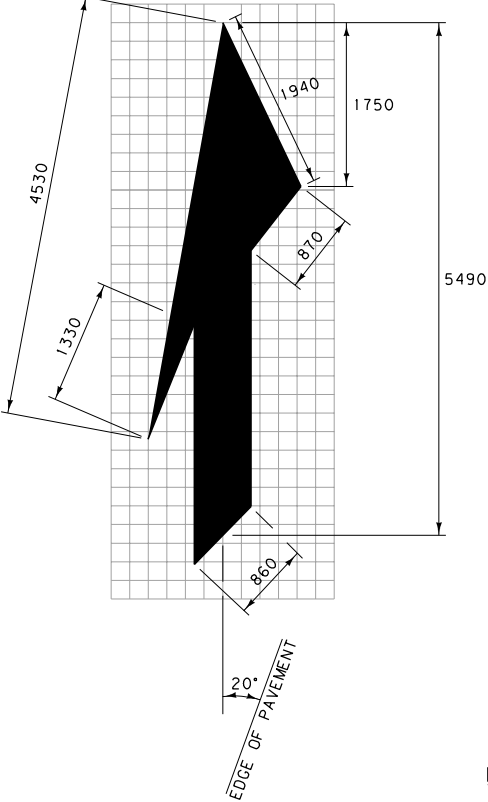


NOTE: REFER TO STRAIGHT & TURN ARROWS FOR MORE DETAIL.

5.5 m LANE DROP ARROW (RIGHT)

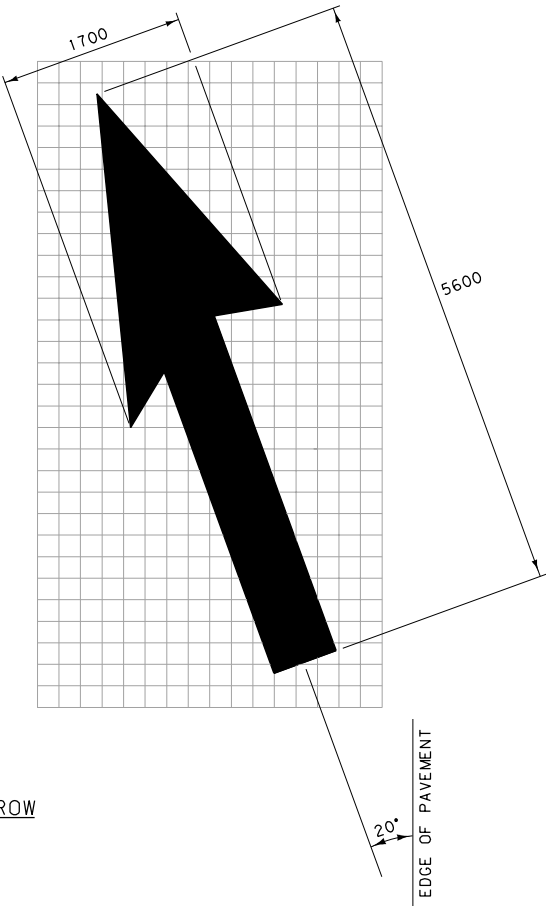
(FOR LEFT LANE, USE MIRROR IMAGE)

AREA = 3.83 m²
P = 1.46 L
E = 1.95 L
(1 SQUARE = 200 mm)



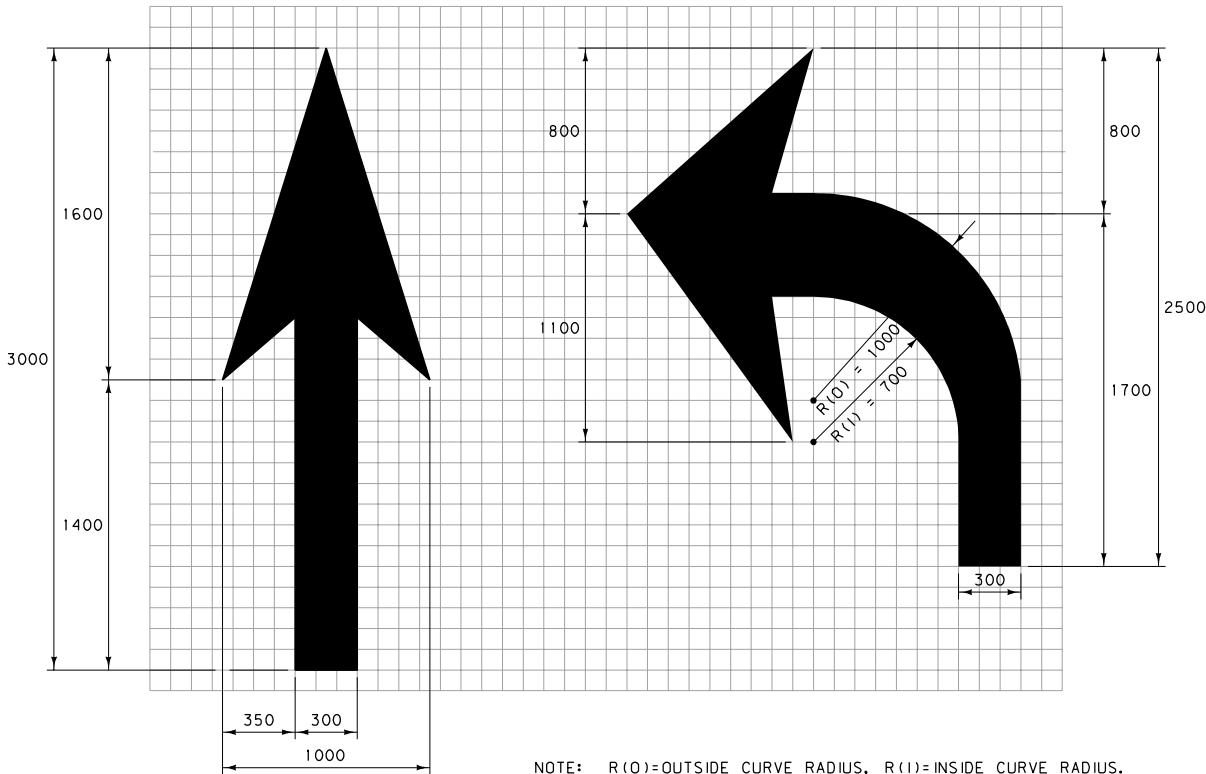
LANE-REDUCTION ARROW

AREA = 3.97 m²
P = 1.51 L
E = 2.02 L
(1 SQUARE = 200 mm)



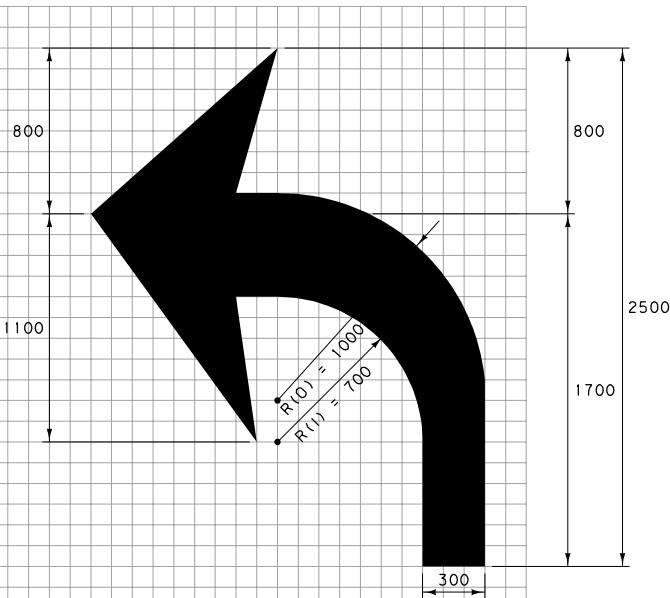
STRAIGHT ARROW

AREA = 1.12 m²
P = 0.43 L
E = 0.57 L
(1 SQUARE = 100 mm)



TURN ARROW

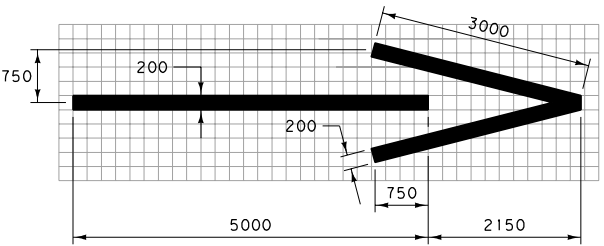
AREA = 1.52 m²
P = 0.58 L
E = 0.77 L
(1 SQUARE = 100 mm)



NOTE: R(O)=OUTSIDE CURVE RADIUS, R(I)=INSIDE CURVE RADIUS.

FREEWAY AND RAMP ARROW

AREA = 2.15 m²
P = 0.82 L
E = 1.09 L
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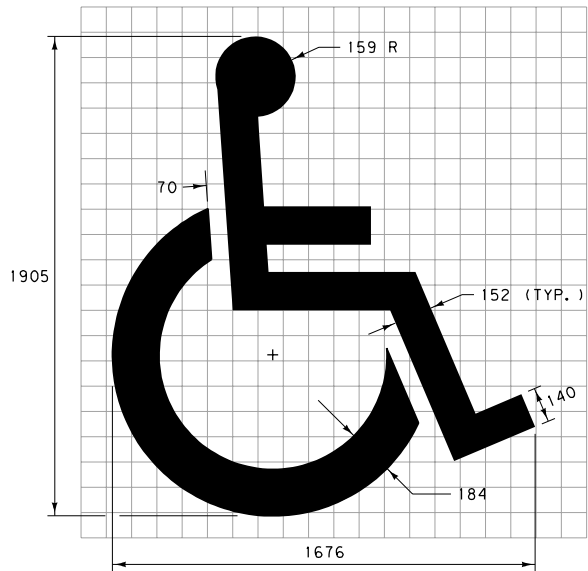
(P) - PAINT VOLUMES ASSUME A 0.381 mm THICKNESS.
(E) - EPOXY VOLUMES ASSUME A 0.508 mm THICKNESS.

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DETAILED DRAWING	
REFERENCE	DWG. NO.
STANDARD SPEC.	620-15
SECTION 620	
PAVEMENT MARKINGS (ARROWS)	
EFFECTIVE: FEBRUARY 2005	
	MONTANA DEPARTMENT OF TRANSPORTATION

HANDICAPPED SYMBOL

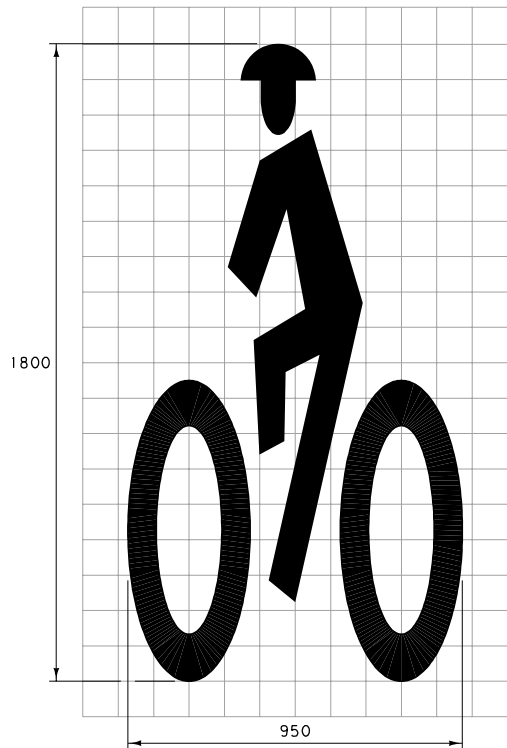
AREA = 0.87 m²
P = 0.33 L
E = 0.44 L
(1 SQUARE = 100 mm)



NOTE: CENTER SYMBOL IN PARKING STALL

BIKE LANE SYMBOL

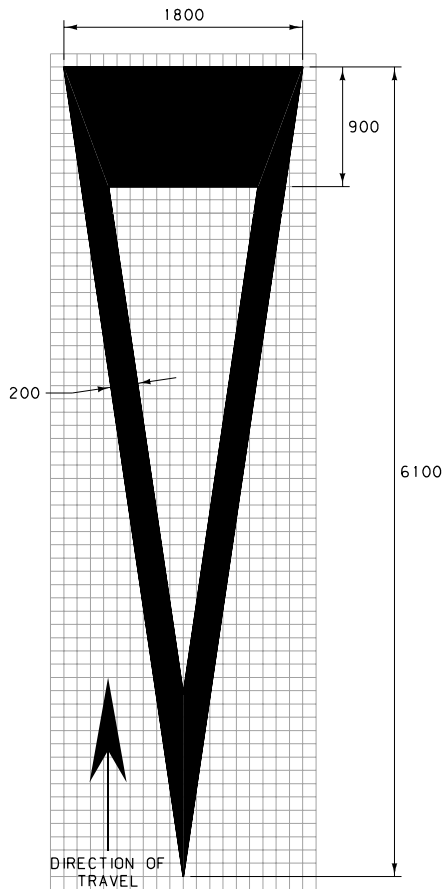
AREA = 0.54 m²
P = 0.21 L
E = 0.27 L
(1 SQUARE = 100 mm)



YIELD AHEAD TRIANGLE

(HIGH SPEED)

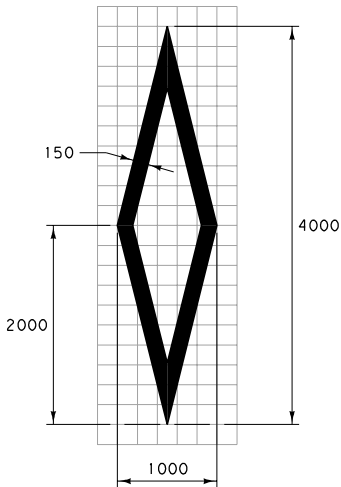
AREA = 3.33 m²
P = 1.27 L
E = 1.69 L
(1 SQUARE = 100 mm)



NOTE: FOR LOW SPEED INSTALLATIONS, THE 900 AND 6100 DIMENSIONS MAY BE REDUCED TO 750 AND 4000 RESPECTIVELY.

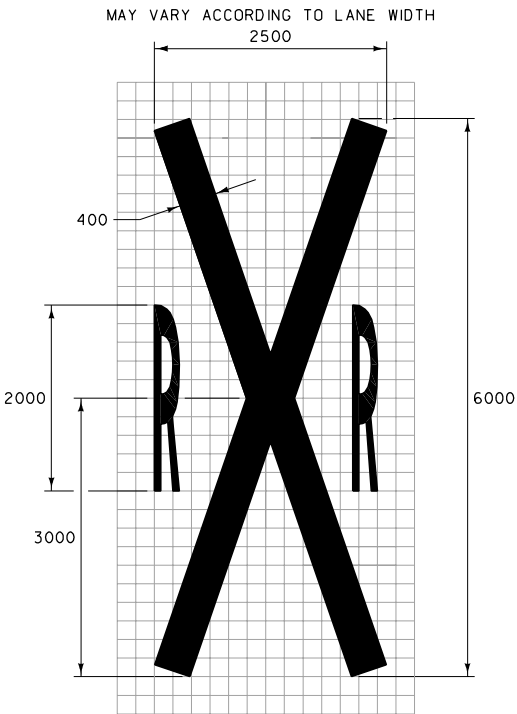
PREFERENTIAL LANE SYMBOL

AREA = 1.05 m²
P = 0.40 L
E = 0.53 L
(1 SQUARE = 200 mm)



RAILROAD CROSSING SYMBOL

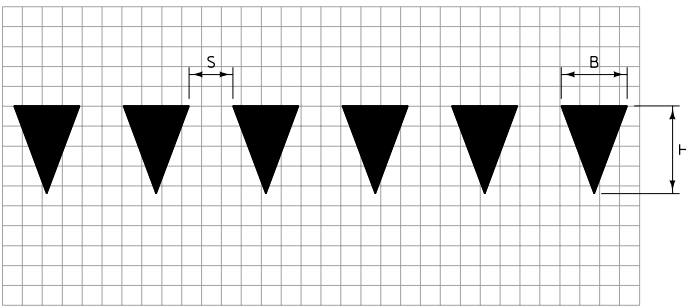
AREA = 5.42 m²
P = 2.07 L
E = 2.75 L
(1 SQUARE = 200 mm)



YIELD LINE LAYOUT

(QUANTITIES PER TRIANGLE)

(B = 300) AREA = 0.07 m²
P = 0.03 L
E = 0.04 L
(B = 600) AREA = 0.27 m²
P = 0.10 L
E = 0.14 L



B = 300 to 600
H = 1.5 * B
S = 75 to 300

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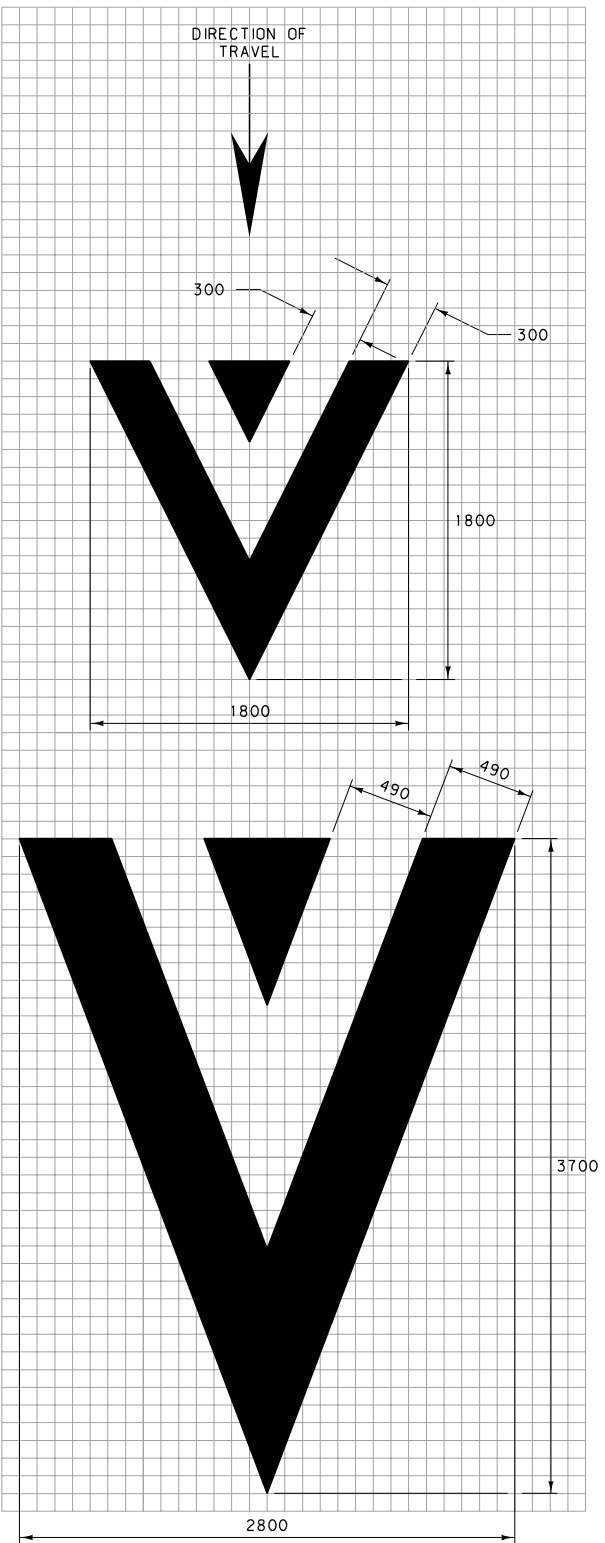
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SPEED HUMP MARKINGS

AREA = 4.56 m²
P = 1.74 L
E = 2.32 L
(1 SQUARE = 100 mm)



DETAILED DRAWING

REFERENCE DWG. NO.
STANDARD SPEC. 620-20
SECTION 620

PAVEMENT MARKINGS
(SYMBOLS)

EFFECTIVE: FEBRUARY 2005

 MONTANA DEPARTMENT
OF TRANSPORTATION

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(mm) UNLESS OTHERWISE NOTED.